

Editor's Overview

THIS 34TH ISSUE OF THE *International Productivity Monitor* contains seven articles on a range of productivity-related topics: the potential gains from more competitive regulatory settings for real per capita GDP growth in Canada; the role of capital measurement issues in accounting for slower productivity growth in Canada; the achievement of productivity lift-off in New Zealand; the productivity implication of a country's position within Global Value Chains; explanations for the U.S. productivity slowdown; cyclical versus trend slowdowns in productivity growth; and the rise of the intangible economy.

A priority for public policy in Canada is to identify measures that can be taken to boost growth in productivity and GDP per capita. In the lead article, **Aled ab Iorwerth** and **Carlos Rosell** from Finance Canada provide econometric evidence that making Canada's regulatory framework as competition friendly as that in the United States would produce significant economic dividends for the country. They find that GDP per capita in Canada could be 2.0 per cent higher in five years and 5.3 per cent higher after 20 years if Canada's foreign direct investment (FDI) regulations were as competitive as those in the United States. They recognize that there are a range of estimates of the benefits, but note that even in the lower bound (at the 95 per cent confidence interval), the gains would be 0.7 per cent and 1.8 per cent of GDP per capita for the medium and long term respectively.

Output per hour growth in the Canadian business sector fell from an average annual rate of advance of 1.7 per cent in 1980-2000 to 1.0 per cent in 2000-2015, with multifactor productivity (MFP) growth decreasing from 0.2 to -0.4 per cent. In the second article in this issue, **Wulong Gu** from Statistics Canada estimates the contribution of three types of capital that are not currently incorporated into the standard growth accounting framework, namely intangible capital, natural resource capital, and public infrastructure capital, to the productivity

slowdown. The impact of changes in capacity utilization on the slowdown is also estimated. The inclusion of natural capital and changes in capacity utilization reduces the MFP slowdown, while the inclusion of intangible capital and public capital in capital input do not contribute to the slowdown.

New Zealand's poor productivity performance has long puzzled economists, especially since the country has pursued market-oriented policies since the 1980s. In the third article in the issue, **Paul Conway** from the New Zealand Productivity Commission provides a comprehensive analysis of the factors holding back productivity in New Zealand and puts forward policies to achieve productivity lift-off in the country. He identifies weak international connections, the geographical segregation of domestic markets and their small size, and a low capital-labour ratio as factors that have contributed to weak productivity growth. New Zealand's reality of being a small country distant from major global market resonates throughout the economy in complex ways and the implications for the country's productivity performance and for productivity-enhancing policies are still poorly understood. Going forward, opening the economy to new opportunities for international connections is key to productivity lift-off.

A key aspect of globalization has been

the development of Global Value Chains (GVCs) where goods are assembled in a coordinated manner across a number of countries. Participation in GVCs can have important impacts on productivity through knowledge spillovers, technology transfer and catch-up. In the fourth article, **Chiara Criscuolo** and **Jonathan Timmis** from the OECD further the analysis of the productivity effects of GVCs by examining the implications of the structure of GVCs and a country's position within GVCs for productivity. They find that becoming more central as a customer or supplier was associated with faster productivity growth of firms in post-2004 EU members. The authors conclude that effective facilitation of GVC integration requires sophisticated policies based on a deep understanding of the nature of GVCs.

It is now widely recognized that productivity growth slowed down considerably in the United States after 2004. A large literature on this important development has appeared, but a consensus for the reasons for the slowdown has not yet emerged. In the fifth article, **Alexander Murray** from the Centre for the Study of Living Standards provides a comprehensive review of the state of knowledge of the US slowdown. He finds the slowdown to be broadly-based and identifies slower total factor productivity growth as the most important proximate driver of the labour productivity slowdown. He concludes that the slowdown is traceable to a decline in the productivity contribution from industries that produce and intensively use information and communications technology (ICT) products.

Separating actual productivity changes into the short-term cyclical component

and long-term trend component has always been a challenge for economists. The Global Financial Crisis (GFC) has made this issue particularly germane since it is paramount to know whether slower productivity growth since 2008 reflects the impact of the crisis or is related to long-term structural developments, or is a combination of both influences. In the sixth article in the issue, **John Fernald** from INSEAD and the Federal Reserve Bank of San Francisco provides a review of the book *Productivity Puzzles across Europe* edited by Philippe Askenazy, Lutz Bellman, Alex Bryson and Eva Moreno Galbis. He notes that the chapters of the book shed much light on the country-specific labour-market institutions that affected the cyclical productivity performance in major European countries in recent years, but that the book has less to say about the factors behind Europe's slowing productivity trend.

In recent years, intangible capital, defined as an asset that is not physical in nature, such as intellectual property and brand recognition, has emerged as a highly important factor on the supply side of the economy. In the seventh and last article in this issue **Chad Syverson** from the University of Chicago reviews the book *Capitalism with Capital: The Rise of the Intangible Economy* by Jonathan Haskel and Stian Westlake. Intangible capital differs from tangible capital in a number of dimensions: it is more a sunk cost; it creates more spillovers, it is more scalable, and it exhibits more synergies. Syverson concludes that the book represents an excellent introduction and overview of the extant thinking on intangible capital and calls it a "can't miss" volume for anyone interested in the topic.